

Iberdrola brings the most innovative wind power generation technologies to WindEurope Bilbao

- *Iberdrola has shown the latest technological advances, including 'Colibrí', a revolutionary drone developed by the Salamanca-based technology company Arbórea Intellbird, which allows the blades to be checked in automated flight without the need to stop the wind turbines.*
- *Mario Ruiz-Tagle, CEO of Iberdrola Spain, attends the inauguration of the Basque company's stand at the largest wind power industry event in Europe, WindEurope 2024, which is currently being held in Bilbao.*
- *The Third Vice-President of the Government and Minister for Ecological Transition, Teresa Ribera, and the Lehendakari, Iñigo Urkullu, have visited the company's exhibition stand.*

From 20 to 22 March, Bilbao will once again be hosting Europe's biggest event for the wind energy sector: [WindEurope](#). The Bilbao Exhibition Centre will be the biggest stage for the most revolutionary technological and innovative solutions for onshore and offshore wind farms.

Iberdrola, official sponsor of WindEurope, is once again bringing a new edition to Bizkaia, following the success of 2022. This fair is the world's most important meeting point for all technological solutions and the most advanced in the wind renewable energy sector.

The opening ceremony today was attended by the CEO of Iberdrola Spain, Mario Ruiz-Tagle, and was visited by the Third Vice-President of the Government and Minister for Ecological Transition, Teresa Ribera, and the Lehendakari, Iñigo Urkullu. At the stand of the Basque company, which has been committed to decarbonisation and [renewable energies](#) for two decades to promote the energy transition, they were able to learn about the most innovative wind energy technologies promoted by Iberdrola.

Together with Arbórea Intellbird, Iberdrola has shared its advances in the inspection of wind turbines in motion with the small and revolutionary Colibrí drone, created by this technology company from Salamanca, which makes it possible to check the blades in automated flight, without the need to stop the wind turbines. The new platform is capable of sending high-resolution data and images directly to Arbórea's computer systems from any wind farm in the world via satellite network.

The new process offers significant advantages: On the one hand, it is the fastest inspection system currently available, as a running wind turbine is scanned in less than ten minutes. This avoids the stresses to which the blades are subjected during shutdown processes and eliminates the associated times. On the other hand, the digital information obtained is integrated into Arbórea's systems to generate a new, updated layer of the blade's digital twin, which is stored in the data cloud. This makes it possible to analyse its evolution and risks in a predictive manner, using procedures patented by the company, which integrate

artificial intelligence processes. In this way, problems are detected at an early stage, leading to improved efficiency and reduced costs.

Iberdrola's Sierra de Dueña wind farm in Salamanca has hosted the first tests of the revolutionary Colibrí programme. Twelve years ago, Arbórea and Iberdrola began testing Aracnocóptero, the first drone capable of generating a digital twin of the blades of a wind turbine, in the windmills that crown the escarpments of this beautiful spot in the Salamanca dehesa. Subsequently, in 2015, these same machines were used to test Arbórea's technology aimed at incorporating a digital model of the internal structure of the blades. This process, which has now been implemented, revolutionised wind inspection procedures.

Today, this magical enclave, full of biodiversity, is once again the setting for the testing of disruptive technology. This aircraft is the result of 15 years of continuous technological evolution, driven by the company since the flight of its first Arachnocopter in 2009.

WindEurope Bilbao: World showcase for the wind energy sector

WindEurope will attract more than 12,000 visitors to BEC! -Bilbao Exhibition Centre- on 20-21 and 22 March. The event brings together more than 500 companies from the wind energy sector.

Europe, a world leader in the sector, is promoting the rapid decarbonisation of economic activity, driven by the need to accelerate energy independence. Europe's future has never been more dependent on clean energy than it is today.

The wind sector is also a fundamental pillar of the [energy transition](#) and is key to meeting the objectives of the PNIEC, which foresees reaching 42% of energy consumption from renewables by 2030. In Spain, with more than 1,260 wind farms and some 250 industrial centres, the sector employs more than 27,600 professionals, contributing 3,106.4 million euros to the country's GDP.

Iberdrola has a stand at this European wind industry event to present the progress made in this key energy for decarbonisation and to drive the energy transition.